GP MANAGEMENT ALGORITHM FOR POLYPS FOUND ON GALLBLADDER ULTRASOUND

Is the patient symptomatic for biliary tract pathology?

Yes

Sludge/stones/cholesterolosis/adenomyomatosis in the gall bladder could resemble polyps. Patients with symptoms suggestive of gall bladder pathology (but only a polyp and no stones on USS) can therefore be referred to discuss surgery.

No

Is the largest polyp 10mm or more?

Yes

Polyps of this size have a risk of malignancy and surgery is advised

No

Does the patient have PSC/IBD?

Yes

PSC is associated with increased risk of biliary tract cancers and surgery is advisable even for small polyps

No

Any other risk factors?
- Asian/South American ethnicity
- Greater than 50 years
- Co-existing gallstones
- Polyp more than 5mm

Yes

USS surveillance advised at 6 months and then 2 yearly.
Discharge after 5 years if no significant growth (at least 2mm increase in size or reaches 10mm or larger).

No

No clear role for USS surveillance.
A single FU US at 2-3 years may be used for reassurance.

primary sclerosing cholangitis (PSC)
Ultrasound scan (USS)
Inflammatory bowel disease (IBD)
SUPPORTING EVIDENCE

Gallbladder polyps (GBP) are a common finding on US, occurring in approximately 1-in-20 examinations (Wiles et al. 2017, Elmasry et al 2016, Babu et al. 2015). The risk of malignancy in GBP is low and many apparent GBP will be benign entities with no malignant potential (Elmasry et al. 2016). The overall evidence for intervention or surveillance in this population is moderate or weak (Wiles et al. 2017). The aim of these guidelines is to help clinicians identify patients with GBP who may benefit from surgical intervention (cholecystectomy) and to stratify future surveillance depending on risk.

1. **Patients symptomatic for biliary symptoms should be referred to discuss surgery**

   Approximately 70% of apparent GBP will be pseudopolyps including cholesterol polyps, sludge or adherent stones that may cause, or be associated with causes of, biliary symptoms (Wiles et al. 2017, Elmasry et al. 2016). These patients may benefit from cholecystectomy and should be referred for discussion.

2. **Patients with GBP ≥10mm or with a history of inflammatory bowel disease (IBD) or primary sclerosing cholangitis (PSC) should be referred to discuss surgery**

   Size is an important risk factor for malignancy. Most malignant polyps are at least 10mm, and this has been reported as one threshold for selecting patients for surgery (Bhatt et al. 2015).

   Patients with PSC are reported to be at significantly increased risk of developing malignancy in GBP (Wiles et al. 2017). However, surgery in this cohort may be more challenging.

   Patients with GBP ≥10mm or with GBP of any size and a history of PSC/IBD should be referred to discuss surgery.

3. **Surveillance for GBP should be offered to some groups of patients**

   The benefit of intervention or surveillance in lower risk groups is uncertain, and there is some variation in the management strategies that are advocated.

   For polyps <6mm without additional risk factors, the risk of malignancy is very low (Elmasry et al. 2016) and there is no clear role for surveillance. A follow-up ultrasound can be arranged in 2-3 years if the patient wishes to have further reassurance.
For polyps 6-9mm in size, or for patients with other factors that have been associated with an increased risk of malignancy (see flow diagram), the mode and clinical benefit of surveillance is controversial. The majority of polyps do not increase in size (Bhatt et al. 2016) and any increase in size is typically slow. However, authors generally advocate surveillance for 2-5 years (Wiles et al 2017, Elmasry et al. 2016). We have recommended surveillance at 6 months and then every 2 years to 5 years to confirm stability. Growth has been associated with malignant potential (Shin et al. 2009). During surveillance, growth of 2mm from baseline, or if the polyp reaches 10mm, should prompt surgical referral.

References: